DOCUMENT RESUME

ED 226 456 EA 015 384

AUTHOR	Melle, Marge; Pratt, Harold
TITLE	Documenting Program Adaptation in a District-Wide Implementation Effort: The Three-Year Evolution from Evaluation to an Instructional Improvement Plan. Research on Concerns-Based Adoption.
INSTITUTION	Texas Univ., Austin. Research and Development Center for Teacher Education.
SPONS AGENCY	National Inst. of Education (ED), Washington, DC.
REPORT NO	R&D-3119
PUB DATE	13 Apr 81
NOTE	27p.; Presented at a symposium, "Assessing Program Adaptation during Implementation: Concepts, Strategies, and Issues," at the Annual Meeting of the American Educational Research Association (Los Angeles, CA, April 13-17, 1981). For related documents, see EA 015 382-383 and ED 204 180-181.
AVAILABLE FROM	Communications Services, Research and Development Center for Teacher Education, Education Annex 3.203, University of Texas, Austin, TX 78712-1288 ($1.75).
PUB TYPE	Speeches/Conference Papers (150) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Administrator Role; *Change Strategies; *Educational Change; Educational Innovation; Instructional Improvement; Intermediate Grades; Principals; *Program Development; Program Evaluation; *Program Implementation
IDENTIFIERS	*Innovation Configurations; Jefferson County School District CO

ABSTRACT

To learn the extent to which a revised elementary science program for grades 3 to 6 had been implemented in the 81 elementary schools of the Jefferson County (Colorado) School District, program developers adopted an assessment system based on the innovation configurations concept. The evolution of this system into an ongoing program for instructional improvement is described in this report. The first stage in the evolution consisted of the collection of data concerning the degree of implementation of identified components of the new program in several randomly selected schools. In the second stage the program developers involved the building principals in the sampled schools in the implementation process, obtaining dramatic increases in implementation levels. The final stage consisted of refining the processes developed in the first two stages to accommodate the needs and concerns expressed by principals, teachers, and administrators. This report concludes with a discussion of the elements of the instructional improvement plan thus developed, and a comparison of these elements with the components of the innovation configurations approach. (PGD)

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

O. Brown

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED226456

EA 015 384

The project presented or reported herein was performed pursuant to a grant from the National Institute of Education, Department of Education. However, the opinions expressed herein do not necessarily reflect the position of policy of the National Institute of Education, and no official endorsement by the National Institute of Education should be inferred.

DOCUMENTING PROGRAM ADAPTATION IN A DISTRICT-WIDE IMPLEMENTATION EFFORT: THE THREE-YEAR EVOLUTION FROM EVALUATION TO AN INSTRUCTIONAL IMPROVEMENT PLAN

Marge Melle

Harold Pratt

Jefferson County Public Schools
Lakewood, Colorado

R & D Report No. 3119

Paper presented at the annual meeting of the
American Educational Research Association
Los Angeles, April 13, 1981

DOCUMENTING PROGRAM ADAPTION IN A DISTRICT-WIDE IMPLEMENTATION EFFORT: THE THREE-YEAR EVOLUTION FROM EVALUATION TO AN INSTRUCTIONAL IMPROVEMENT PLAN

Introduction

Curriculum developers are increasingly being asked, "Is your program implemented?" or "How well or to what extent is your program being implemented?" Sometimes the question is phrased as, "How much is the program being used?" "Is it the original program as written or have changes been made in individual classrooms by individual teachers?" These questions are being asked more and more by district level administrators, board of education members and citizens who want to know if the money they have put into the development of the new programs is producing changes in the classroom for their students. Based upon the need to answer these questions, the program developers in the Jefferson County Public Schools set out to find out to what extent a revised elementary science program had been implemented in the elementary schools in grades 3 through 6. The developers thought that this information could be used to improve the implementation where weaknesses were found. It soon became apparent that an outside evaluation alone did not produce any change or improvement in implementation in the schools being evaluated. This paper will describe how a system based on the concept of innovation configurations to evaluate the extent of implementation of a program evolved in a three-year period to an ongoing plan to improve instruction.

The Assessment of the Extent of Implementation

The Jefferson County (Colorado) Public Schools, a suburban school district which serves approximately 80,000 students, responded to community and teacher-stated need by revising its elementary science curriculums for grades 3 through 6 in 81 elementary schools. The revised program was a series of discrete units

taught through a "hands-on" technique requiring small group interaction, questioning techniques and guided instruction. Because many teachers in the district had no previous experience with these modes of instruction an extensive staff development was designed to support the implementation of the new program. (Pratt, Metzdorf, Melle, Loucks, 1980)

The staff of the Texas Research and Development Center for Teacher Education collaborated with the design of the staff development activities using the Concerns Based Adoption Model (CBAM) as the basis for a very extensive staff development program. (Loucks, Pratt, 1979) This program consisted of one or two after-school, pre-inservice meetings; three full release days of inservice for all teachers; in school, one-to-one interaction with teachers; and a half-day of principal inservice training. These activities were carefully designed to meet the needs of the teachers as identified by their Stage of Concern (SoC). Data were collected prior to each inservice session, and the inservice plan was tailored to meet the needs of the teachers at each stage. (Hall, Loucks, 1978)

Each time the SoC data were collected the Texas R&D staff also collected Levels of Use (LoU) data on the teachers who were implementing the program. (Hall, Loucks, Rutherford, Newlove, 1975) Similar data were collected again approximately one year after the final inservice session. This LoU data proved to be a very useful and straightforward method of measuring how well the program had been implemented at several points in time throughout the process. Although the program developers found this data very useful in monitoring implementation and in identifying schools where the implementation efforts were not going well, more explanation was needed as to what could be done to help the teachers involved.

From the beginning the Science Department had been committed to evaluating the extent of implementation of the program. A proposal was made by the Science Department to the Division of Program Evaluation to develop a process for measuring the extent to which the program had been implemented in randomly selected schools. It made little sense to the program developers to measure the effect of the program on students if the extent to which the program was in place in schools was not known. The program developers also believed it is less appropriate to measure the effect of a program such as science which has a more complex and wide range of objectives by only measuring student outcomes.

Influenced by the concept of configuration as developed by the Texas R&D Center, the Science Department and Division of Program Evaluation staff began developing a group of components which described what a well-implemented program would look like in an individual elementary school. This list of components (Figure 1) was written from the developers' point of view based on what was realistic to expect of teachers in most classrooms in the district. Detailed descriptions of each component were written in order to objectively measure the extent to which that element was in place in any one classroom. The behaviors were placed on a five-point Likert scale: 1--outside the intended program, 2 and 3--getting a good start, 4--well on the way, 5--best practice in operation. An example component appears in Figure 2.

Because of the large number of schools and the extensive nature of the staff development activities, the inservice program had been divided into three phases. Phase I inservice began in January, 1977, with Phase II following in September of 1977 and Phase III in January, 1978. One year after the inservice session had been completed Phase I and II data were collected from 11 randomly selected

FIGURE 1

COMPONENTS OF THE SCIENCE PROGRAM

I. Program components over which the district policy or procedure appear to have the major influence for implementation in the classroom:

1. The recommended percentage of teaching time during the day is devoted to science. An average of 15% of the student's day (10% for third grade) should be devoted to science.

2. Science is taught according to the district guide. During the school year the teacher teaches all units, all objectives of each unit and 90% of the activities.

3. Students' learning is assessed according to the district science guide. According to a review of each unit, the teacher uses the guide assessments with students 85% of the time.

4. Basic skills, as differentiated by the continuum in each curriculum area, are being integrated into the science program. The basic skills keyed in the guide are being introduced or stressed in their subject area time allotment while they are being reinforced during science instruction.

5. The outdoors is used as a classroom when recommended. Whenever outdoor activities are recommended as part of a unit, they are always included.

II. Program components over which the building principal and the teacher both have a major responsibility for influencing implementation in the building and classroom:

6. All materials, equipment and media are available. Appropriate commercial guides and the district guide are available for use. Enough materials are available for individual or small group usage. A storage system of logical sequence is established.

7. Principals have arranged for release of teachers for the total in-service training package and have allocated financial support to the program.

8. Long and short-range planning is evident. The year's schedule is written out and being implemented by the teacher or the team. This schedule reflects attention to seasonal demands, sharing of materials, and maximum utilization of space and personnel. Before each unit is taught, overall planning for that unit takes place.

III. Program components over which the teacher has the major influence for implementation in the classroom:

9. Class time in science is used efficiently and effectively (time on task). At least 75% of the class time is devoted to exploration, pupil interaction, recording data, discussions and listening to each other. An efficient management system for distribution and clean-up of materials is evident.

10. Teacher-student interaction facilitates the program. Using the students' language, the teacher shares with students the objectives of the units. Discussion techniques include: neutral rewarding, wait time, questions above recall level, maximized use of student-student discussion; and data sharing.

11. The classroom environment and arrangement facilitates student-student interaction in small groups. Furniture and materials are arranged in order to facilitate small group interaction. Student behaviors include sharing of materials, listening to each other, working together towards a group goal, and interacting with each other (cooperative learning). Students are task-oriented most of the time.

12. The instruction in the classroom follows the stages of the learning cycle in science: exploration, concept formation, concept application.

FIGURE 2. EXAMPLE OF A COMPONENT

2 IS SCIENCE TAUGHT ACCORDING TO R-1 GUIDE ?

OUTSIDE INTENDED PROGRAM 1	GETTING A GOOD START 2 3	BEST PRACTICES WORKING 4 5
A During the school year the teacher covers less than 85% of the objectives and activities. The teacher may or may not cover units in the guide. If units are taught, more activities are omitted than included.	**A** During the school year 85% of the objectives and 85% of the activities are taught. The teacher covers the units as written and spends the allotted time (see #1). Some units may be abbreviated because an extra amount of time was spent on another unit.	**A** During the school year the teacher teaches all units, all objectives of each unit and 90% of the activities. At the end of some objectives teacher uses Optional Activities to extend the unit with small groups of students.
B Objectives or activities are not sequenced. Objectives may be used but teacher-made activities mainly are used to accomplish the objectives.	**B** The teacher can: - Point in the guide to the objective that is currently being taught. - Describe what objectives and activities went before and what objectives will come after current activities.	**B** The teacher can relate what objective is being studied and how the activity pertains to accomplishing the objective. He/she can relate what objectives preceded and will succeed the objective being taught.
C Supplementary media is frequently used in addition to or to the exclusion of hands-on activities.	**C** Teacher uses supplementary media sparingly.	**C** Teacher uses supplementary media sparingly and can demonstrate how supplements which are used support the objectives being taught.

schools using the 12 components listed in Figure 1. Instruments and data recording sheets for use in monitoring extent of the implementation of the program as defined by the 12 components were developed by the district Department of Evaluation. (Darnell, 1979) These included a focused teacher interview, a classroom observation checklist, a focused principal interview, and a focused media specialist interview. Specially trained, certificated teachers and staff members from the Evaluation and Science Departments conducted interviews and three full period classroom observations for each teacher.

The program developers' role, in addition to co-designing the process, was 1) to collect and summarize data, 2) to present resulting data to staff, 3) to cooperate and aid the Evaluation Department, and 4) to encourage and solicit follow-up from the principal. Summary of the results is given in Figure 3. The results of this phase of evaluation gave the program developers a report on the extent of implementation -- a statement of what was in place for each building. (Loucks, Melle, 1980) As the data indicate, all components were not implemented to the same extent, the configurations for each teacher and each school being different.

Although the major purpose of the activity was to measure the extent of implementation and report it to the district administration, individual school principals and citizens' advisory groups were eager to know the status of the programs, for which thousands of dollars had been recommended. The program developers assumed that principals would use the data as a basis for the improvement of the implementation of the science program. However, when the data were presented to the principals and they were encouraged to use it in a follow-up activity with their staffs, they expressed little interest in doing so. Four major reasons for the lack of follow-up seemed apparent.

1. The principals and teachers had little or no knowledge of the components or the specific behaviors for each component that were being used as the basis for the evaluation.
2. Teachers were guaranteed anonymity. No data were linked to individual teachers. Data was summarized for the total school only. (See Figure 3)
3. Principals had virtually no role in collecting, summarizing, or reporting the data to their staffs.
4. The schools had been chosen randomly; principals had not elected to participate in the program for the purpose of improving the implementation of the science program.

These above conditions had purposely been maintained by the Science and Evaluation Departments in order to collect "clean" data in an unobtrusive way. The purpose was to determine the extent to which the program had been implemented, but not to affect the implementation in any way.

The Modification of the Plan

During the next year the plan changed emphasis. Evaluating the extent of implementation gave summative information, but from the program developers' viewpoint, this was not useful unless the information would result in an improvement of instruction for students. Considering the research done in the district by the Texas R&D Center, the program developers discovered that the behaviors of teachers in individual schools implementing the revised program appeared to be a function of how principals ran their schools. The program developers hypothesized that a most-important factor in explaining the quality and quantity of change in the schools was what the principals did or did not do. (Hall, Hord, Griffin, 1980)

THE REVISED ELEMENTARY SCIENCE PROGRAM COMPONENTS

FIGURE 3

Sample Building Summary Sheet

	Outside intended program	Getting a good start	Well on the way	Best practices working
	1	2	3	4	5
1. Time is devoted to science	*** **	*	**	*	**
2. Science is taught according to R-1 Guide	*** ***	*** **			
3. Assessment of pupil learning	*** ***	*** **		.	
4. Integration of basic skills	*	***** ****	*		
5. The outdoor classroom is used as recommended		*** **	*** *	**	
6. Recommended materials, equipment and media are available			*** **	*** *	**
7. Inservicing and financial arrangements have been made		*	*** **	*** **	
8. Long and short range planning		***	*** ***	**	
9. Use of class time	**	**	****	**	*
10. Teacher-Pupil interaction facilitates program	***	****	****		
11. Classroom environment facilitates program		***	***	***	**
12. Instruction is sequenced to facilitate the guided inquiry learning approach	**	**** *	****		

School Winter Elementary Teacher all 3, 4, 5, 6 teachers

R-1 Program Evaluation

The purpose of the second round of evaluation in 1979-80 in the Phase III schools began to shift more toward an effort to improve the implementation of the program, rather than evaluate the extent of implementation at any one given time. To do so the principals become a part of the process. (Melle, Darnell, 1980)

The definitions of the program components were refined by a principals' advisory committee. This group of 20 principals chosen by the program developers had previously had the evaluation study done in their school or had a particularly high interest in the science education in their buildings. They kept logs of strategies they used in their buildings to implement science and they studied and modified the original components to make them more meaningful and useable in the field. Their contributions were pooled to produce a "Principal's Handbook" that not only provided these refined science program components and their behavior descriptors but also suggested administrative strategies for implementing each component. Figure 2 is an example of a page from the handbook.

A random sample of five Phase III schools was chosen. In addition to the random study, another sample of five schools in which the principal alone did the observations and interviews was included. These principals volunteered their efforts and those of their staffs.

Before school began in the fall of the 1979-80 school year, ten principals involved in the monitoring process attended a 2-day workshop presented by the program developers. This participative workshop provided small group interactive practice in understanding 1) The nature of the elementary science program grades 3-6 as defined by the components, 2) the principal strategies listed in the "Principal's Handbook" for implementing the program, and 3) the classroom observation and focused interview techniques used to obtain data.

Principals presented the components and the process of data gathering to be used within the building to their staffs. With administrators, program developers and teachers all aware of the components and the process of monitoring, principals and program developers began collecting data shortly after school began. Trained outside observers were not used as they had been in the first data collection.

Each principal held a focused interview with every teacher teaching science in the school in addition to conducting one science classroom observation for an entire class period for each teacher. The program developers also conducted one science classroom observation for a total class period for each teacher in the 5 random sample buildings. The principals formally observed the 5 volunteer school teachers while the program managers observed informally. The principal and program managers then met to collect and summarize interview and observation data for each teacher. They assessed each classroom on every component and constructed an individual teacher profile. In addition, a building summary profile was prepared.

The major differences between the Phase III and Phase I and II studies were:

1. The principal of each school was trained in a 2-day workshop and acted as the interviewer and one of the observers in each classroom in the building. A member of the science department acted as another observer in 5 schools and as an informal, drop-in observer in the additional 5 volunteer schools. No additional trained outside observer was used.
2. Program developers and principals shared the criteria for the study before the monitoring began, thus making all participants aware of their goals before entering the study. This contrasted

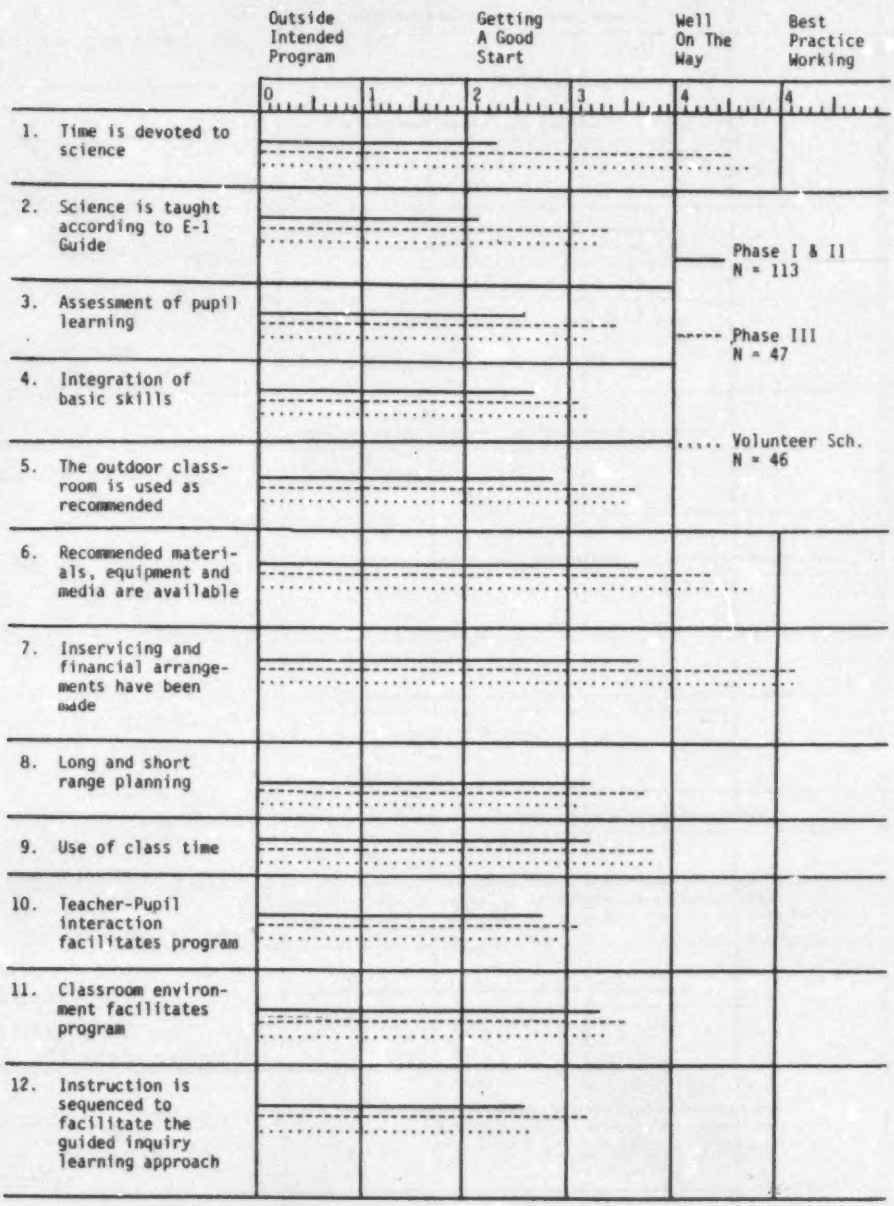
with the previous year when the components were not known until the data feedback sessions with the staff were held.

The average extent of implementation for all classrooms was indicated at a point on the continuum from "outside intended program" to "best practices working" for each of the 12 components for the 10 schools. The data were compiled for each classroom and are summarized in Figure 4.

The Phase III evaluation revealed that the level of implementation by schools of each component increased dramatically when principals were involved in the monitoring process from the beginning, when the component information was shared with staffs before the program was monitored, and when the summarized data and results were shared on a one-to-one basis with each teacher involved. This is evident in the higher ratings of the Phase III schools on all components when compared to the ratings of the Phase I and II schools. Also, the role of program developer became one of support and of a source of expertise to the building administrator. They worked together with a mutual goal of aiding staff in understanding the components, implementing the program in terms of the components, and collecting, summarizing and sharing individual and total staff data. Teachers, knowing the component goals, modified their teaching practices and demonstrated willingness to change behaviors when principals set goals. The process itself appeared to improve instruction.

As follow up, principals made suggestions as they conducted their interviews and made their classroom observations. The knowledge that the principals and teachers had of the program components, coupled with a desire to "do well" on the evaluation, seemed to produce an improvement during the time of the evaluation process but ongoing commitment to a general plan of instructional improvement for elementary science based upon the components and the data from the monitoring did not seem to be fully in place.

FIGURE 4


Outside Intended Program
Getting A Good Start
Well On The Way
Best Practice Working
0
1
2
3
4
4
1. Time is devoted to science
2. Science is taught according to E-1 Guide
3. Assessment of pupil learning
4. Integration of basic skills
5. The outdoor classroom is used as recommended
6. Recommended materials, equipment and media are available
7. Inservicing and financial arrangements have been made
8. Long and short range planning
9. Use of class time
10. Teacher-Pupil interaction facilitates program
11. Classroom environment facilitates program
12. Instruction is sequenced to facilitate the guided inquiry learning approach
Phase I & II N = 113
Phase III N = 47
Volunteer Sch. N = 46

A comparison of the Average Extent of Implementation on Each Component for classrooms in Phase I and II, Phase III, and Volunteer Schools

The Development of an Instructional Improvement Plan: 1980-81

After two years the commitment to evaluate the extent of implementation through a random sampling process of all three phases of the implementation activity was completed. The 5 volunteer schools in Phase III had provided a transition between a rather pure approach to evaluation and what had now become the goal of the program developers -- that of developing an ongoing plan in selective schools where the program developers could work in close cooperation with the principal and the staff of a school in carrying out due process of improving instruction in elementary science. A new dimension was added during Phase III. Since the evaluation department was not involved in the monitoring of the implementation in the 10 schools, they undertook the task of evaluating the evaluation process itself. They found that the process was very time consuming, but that the principals were unanimous in agreeing the plan was workable and should be a high priority as a part of their responsibility as an instructional leader.

With this process evaluation report in hand and the data from the first three phases completed and summarized, the program developers organized a full day in-house workshop in the spring of 1980 for a group of 27 principals, teachers, central administrators, and the officers of the local teachers' organization. Out of the diversity of needs and concerns of this group came the Instructional Improvement Plan for Elementary Science. The Instructional Improvement Plan had many similarities to the plan carried out in Phase III, but also had some very significant differences as the following explanation of the IIP points out. Figure 6 is a schematic outline of the flow of activities in the IIP as well as an explanation of the role of the three groups involved, the principal, staff, and program developers.

I. Establish commitment (The Roman numerals in this outline correspond to those in the right hand column of Figure 5.)

A. It is very important that the staff in each school decide when and if they want to look at the science program and work on improving their implementation of it. The principal, of course, plays a key role in leading his/her staff into making this decision. It is important that he/she stresses it as a positive activity, not one which is designed to find fault with the staff and highlight their deficiencies in teaching the district program. The goal of the process is an attitude for the principal and staff that seems to imply, "We think we are doing well in the program. Let's find out what specific things are truly working and where we can make it even better."

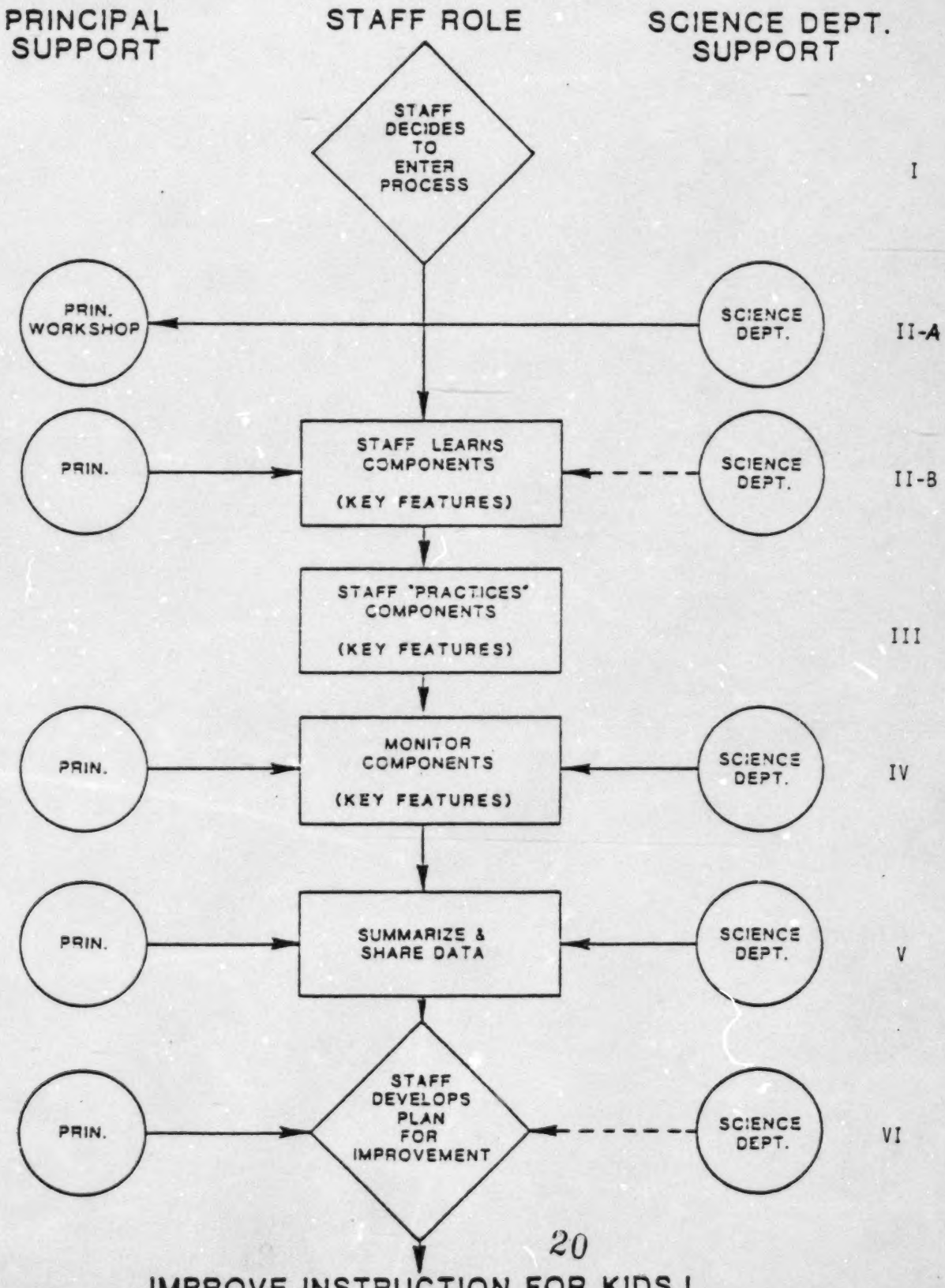
II. Communicate

A. The program developers conduct a two-day principals' workshop with the principals and assistant principals of the participating schools. During this workshop the program is defined through the use of the configuration components. Strategies in the "Principal's Handbook" are explained and disucssed. The data collecting tools that are used in the monitoring of the components are shared and practice sessions are held in actual classrooms.

B. The principal and the program manager hold a series of meetings with the staff to present the components of the program and the total process of monitoring, data collection and the development of the Instructional Improvement Plan. This process may take several meetings and cover a period of several weeks. Usually it is held in small groups, if possible, so that a give-and-take can occur between a principal, program manager, and the staff of the school.

FIGURE 5

INSTRUCTIONAL IMPROVEMENT PLAN
ELEMENTARY SCIENCE



IMPROVE INSTRUCTION FOR KIDS !

III. "Practice" the Components

Soon after the teachers receive the information on the components, they are urged to conduct an informal, private self-assessment to determine how they feel they are doing on each of the components. Based upon this informal self-assessment they and their principal can request whatever help they want from the program developers. This usually occurs on a one-to-one basis but also may take place in staff meetings or in the form of short inservice-type sessions after school.

This practice time usually takes from one to three months during which the staff adapt and modify their teaching based upon their in-depth study of the components. It allows them time to gain confidence in their use of the elementary science program and also to become acquainted with the program developers who will eventually be doing the monitoring of their classroom teaching. This part of the process is a significant departure from the practice of Phases I, II and III. Because the major objective of the IIP is to improve instruction, every effort is given to helping teachers improve instruction before the monitoring takes place. Allowing them to improve prior to the monitoring will optimize the results, and teachers should feel positive and gratified by them. Some deficiencies and problems will still persist but these cannot be blamed on the fact that the monitoring took place during an inopportune time or that the teacher was not prepared for the classroom observations. Problems that are left over after the practice period are probably real problems that should and can be addressed more readily by the teacher, principal and program developer.

This one to three months period also allows time for the building administrator to practice the use of the monitoring instruments and develop a working relationship with the program developers and the principals in other

schools who are currently involved with the same process. In general, the period of time is very useful in developing trust and a mutual working relationship among the staff, principal and program developers. Since the major objective of the process is the improvement of what goes on in the individual classrooms, and not pure evaluation, it is important that a good working relationship exists among all the groups involved. The feedback from Phase III indicated that when teachers did not understand the process or the instruments being used in the monitoring or when they did not understand the use that would be made of the data, some of them were threatened by the entire process. The IIP practice time allows them to gain a trust in the program developers and principal and to generally accept the process as a nonthreatening one.

IV. Collect Data

Data very similar to that collected in Phase III are collected for all teachers. Both the principal and the program manager make a classroom observation of all teachers involved in teaching science. If at all possible the data from the observations are shared immediately with the teacher in an informal classroom setting. Sometimes suggestions are made for improvement but in all cases teachers are immediately able to read and see the data that had been collected.

V. Summarize and Share Data

The data from the interviews and observation checklist are jointly summarized by the principal and program developers. As soon as possible the principal will then share each teacher's profile with him/her in a one-on-one conference. Although much of the data has been informally shared earlier, this is the first chance for the teacher to see a profile of his/her performance on all the components on a form very much like Figure 2.

VI. After the one-to-one conferences have been completed by the principal, the principal, staff, and program developers usually meet after school to review the total school profile and analyze their strengths and weaknesses. At this meeting the process begins to develop a specific plan and timeline for improving the components that need attention. Another meeting or two may be necessary with the sub-group of the teachers, principal and program developers to develop a plan in writing that is then presented to the entire staff.

The elements of the improvement plan will obviously vary from school to school and may contain one of several different kinds of activities. These may include:

1. A formal inservice program for most members of the staff may be planned. One of the most frequently conducted inservices is that on assessment (component 3). Often an entire staff will be weak in this component due probably to a lack of emphasis by the program developers in the initial inservice program and a limited amount of help in the program guides.
2. Individual weaknesses may be identified for specific teachers that will be addressed through one-to-one contact between the principal and the teacher or the program developers and the teacher. This often includes work on one of the last three components.
3. Specific changes in the scheduled organization of the school may be necessary to improve components 1 and 2.
4. The principal may commit himself/herself to working on and improving components 6, 7, or 8.

The Comparison of IIP with the Innovation Configuration Concept

It should be fairly clear from the above discussion that the evolution of the Instructional Improvement Plan was based upon and was an outgrowth of the concept innovation configurations but differs from it in one or two significant ways. The components used are those of the program developers. The description of the levels and the levels of accomplishment within each of the components are those described by the developers after many classroom observations and through extensive testing and feedback on the part of teachers and principals. Based upon use in 22 schools they appear to be realistic expectations for the behaviors of teachers and principals. Nevertheless they have not been empirically derived by observing the actual practice of classroom teachers as described in the first two papers.

Early in the development of these components a limited search was made by the Texas R&D staff through an expansion of their LoU interviews to find a set of configurations for the revised elementary science curriculum. This search did not produce a set of configurations similar to those described in the first paper. (Hall, 1981) Both the staff of the Texas R&D Center and the program developers attributed this result to the fact that the revised elementary science guide and the three-day inservice program had been very directive and explicit in describing the way the elementary science program should be implemented, leaving teachers little opportunity to develop variations or different configurations on their own. Very possibly, if this search had been conducted several years after the program had been implemented, instead of in the first year following the inservice program, a variety of patterns or configurations would have been detected.

An important similarity does exist between the components described in this paper and the component checklist described in the above papers. A clear distinction is

drawn for each component at a point below which the practice is considered unacceptable by the program developers. This allows a very clear communication to both principals and teachers as to what is expected of them during the implementation and continuing maintenance of the program. It should be noted that in the case of this paper these components and levels of acceptance were not developed prior to the inservice program, nor was there early communication to principals and staffs about the new program. In hindsight this would have been highly desirable and could have been accomplished through the observations and activities that occurred in the field test classrooms during the two years of program development.

One of the most significant features or uses of the components described in this paper has been that of improving instruction in the classroom through a variety of activities that have been conducted with the principals and teachers before, during, and after the observations made based on the innovative configurations. The program developers have become more interested in this aspect rather than the evaluation of whether or not the program has been implemented. The evolution of this process which occurred over a three-year period is outlined in Figure 6. Although the IIP is being used for the first time this school year in 6 schools, it has already proved to be an effective and highly accepted way of bringing about staff development activities centered upon the improvement of the implementation of a given program. The success and acceptance of the program is indicated by the fact that the entire Division of Instruction in the Jefferson County Public Schools is currently developing a district-wide plan at the direction of the Board of Education which is very similar to the one described here. This process will eventually be used by all schools and in all subject areas to monitor and improve instruction.

FIGURE 6

EVOLUTION OF INSTRUCTIONAL IMPROVEMENT PLAN FOR ELEMENTARY SCIENCE

	PHASE I & II 1978-79	PHASE III 1979-80	INSTRUCTIONAL IMPROVEMENT PLAN 1980-81
PURPOSE	Evaluation of Extent of Implementation (Random Sample)	Monitor Implementation Involve Principal	Improve Instruction Central Office - School Mutual Responsibility
USE OF COMPONENTS	Developed as Criteria for Evaluation Not Presented to Staff	Refined by Principals Advisory Committee Principals Presented to Staff Criteria for Monitor	Presented by Program Manager and Principals Self Assessment Basis of Help and Inservice Time to Practice Basis of IIP
PRINCIPAL'S ROLE	Source of Data Only	Attended 2-day Workshop Present Key Features Collect and Summarize Data Presented Data to Staff	Attend 2-day Workshop Develop Staff Commitment Present Key Features Collect and Summarize Data Present Data to Staff Develop Local IIP
TEACHER ROLE	Source of Data Only Not Identified with Data	Aware of Process Identified with Data	Commitment to Improve Identified with Data
PROGRAM DEVELOPER ROLE	Design Process Collected and Summarized Data Presented Data to Staff Cooperation with Evaluation Department Urged Principal to Follow up	Designed Process Collected and Summarized Data Presented Data to Staff Evaluation Department Evaluated Process Urged Principal to Follow-up	Developed Process with Advisory Committee Conduct Principals Works Collect and Summarize Data Assist Principal and Teacher with Their Roles
RESULTS	Report on Implementation Very Limited Follow-up	Report on Implementation (Phase III Results Better Than I & III) Some Follow-up	Continuing Improvement of Classroom Instruction Commonality of purpose of field and staff personnel.

REFERENCES

Darnell, C. D. The evaluation report for the extent of implementation of the Jefferson County Schools revised elementary science program. Jefferson County Public Schools, March, 1979.

Hall, G. E., Loucks, S. F., Rutherford, W. L., & Newlove, B. N. Levels of use of the innovation: A framework for analyzing innovation adoption. The Journal of Teacher Education, Spring, 1975, 26(1), 52-56.

Hall, G. E. & Loucks, S. F. Teacher concerns as a basis for facilitating and personalizing staff development. Teachers College Record, September, 1978, 80(1), 36-53.

Hall, G. E. & Loucks, S. F. The concept of innovation configurations: an approach to addressing program adoption. Paper presented to the American Educational Research Association annual meeting, Los Angeles, April, 1981.

Loucks, S. F. & Pratt, H. Effective curriculum change through a concerns-based approach to planning and staff development. Educational Leadership, December, 1979, 37(3), 212-215.

Loucks, S. F. & Melle, M. Implementation of a district-wide science curriculum: The effects of a three-year effort. Paper presented at the American Educational Research Association annual meeting, Boston, 1980.

Melle, M. & Darnell, D. Development of an elementary science instructional improvement plan. Jefferson County Public Schools, March, 1980.

Pratt, H., Melle, M., Metzdorf, J., & Loucks, S. F. The design and utilization of a concerns-based staff development program for implementing a revised science curriculum in eighty elementary schools. Paper presented at the annual meeting of the American Educational Research Association, Boston, April, 1980.